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Foreword

This document is intended to be used as a starting place for actions by the Alaska Region of the National Park Service, relating to off-road vehicle (ORV) uses. It is a snapshot that assesses the status of uses in NPS units. This report raises substantial questions, rightfully raised but not necessarily answered in this document. Those answers will require considerably more time and attention. They can only be addressed in the full context of the suite of resource management, subsistence management, visitor management, education, and other NPS responsibilities.

Summary

In the past several years, interest in off-road-vehicle use and policy on Alaska park lands has increased. Some user groups have expressed interest in increased ORV access while other groups contend that existing ORV use in parks is impairing park resources. In October 2001, the NPS regional director appointed a Regional Off-Road Vehicle (ORV) Task Force to review all aspects of ORV use and management in NPS units. The task force reviewed laws, regulations, and policies applicable to ORV use; document current NPS knowledge of existing ORV use, impacts, and trends; compiled existing and ongoing research on ORVs; and developed ideas for the next steps the NPS should consider taking.

Part I includes a Solicitor's Opinion, setting forth the NPS authority to allow and regulate ORV use in Alaska national park units, as well as a review of NPS policies. The opinion states that while national NPS regulations generally prohibit the use of ORVs, those regulations have been modified in Alaska in two main aspects. First, pursuant to the Organic Act, Alaska specific regulations provide that ORVs may be allowed at the discretion of the superintendents on existing routes with a permit in areas not designated as wilderness. Second, the Alaska National Interest Lands Conservation Act (ANILCA) modifies NPS discretion and regulations mentioned above by allowing ORVs under certain circumstances. A review of Servicewide Management Policies identified a wide variety of compliance considerations for decision makers to address in determining whether to allow or prohibit ORV uses in their areas.

Part II summarizes results from a preliminary survey completed by Alaska park staff in February 2002 on current ORV use patterns in Alaska park units. The data gathered from this survey can only be considered a rough approximation with a significant margin of error. The survey asked for highly subjective data based on the best professional judgement of a limited number of people. The data were not gathered pursuant to a systematic on-the-ground survey. In many locations, NPS knowledge of routes, route condition, and associated impacts is neither up-to-date nor complete.

Thirteen Alaska park units responded to the Task Force survey stating that ORV use occurs. Park staff in these 13 units reported a total of 65 known routes totaling approximately 700 miles. An unknown amount of dispersed use also occurs. Two-thirds of the known routes occur in Wrangell - St. Elias, Denali, and Lake Clark. Approximately 50 percent of the routes are in designated or suitable wilderness. Almost all routes are unplanned, user developed

routes. It is thought that about three-quarters are used for both subsistence and recreation and less than half of the routes are used to access inholdings. Where route conditions were known, park staff characterized almost half of the routes as being in generally "good condition," about a third were identified as having "some problems," and less than a quarter were considered "severely degraded." Staff also stated that ORV use is increasing on about half of the routes and that the same percentages of routes are deteriorating. Almost all the routes are monitored somewhat. The relative priorities of ORV management efforts vary from unit to unit based on differences in types of use, research findings, and terrain.

Part III summarizes completed and on-going research on ORV use and impacts.

This report presents the current state of NPS knowledge in Alaska national park units. Many follow-ups could be done at a variety of levels. This report's final section suggests several steps to develop a consistently applied process for determining how to manage access and manage ORV impacts. It also includes involving the public and initiating studies to document existing ORV use and impacts.



ORV Use in Alaska National Park System Units, February 2003

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INTRODUCTION

In October 2001, the NPS regional director appointed a Regional Off-Road Vehicle (ORV) Task Force to review all aspects of ORV use and management in NPS units. The regional director emphasized the importance of the review by reiterating a general belief that ORV uses in NPS areas have increased significantly since 1980, that there was a public impression that NPS seemed unwilling or unable to effectively manage such uses consistent with existing laws and policies, and that some associated resource impacts might be approaching a level of significant impacts or constitute an impairment of environmental values in some areas.

During the 22 years since the Alaska National Interest Lands Conservation Act (ANILCA) established or expanded most of the NPS units in Alaska, the use of ORVs in the NPS units has

proved to be a difficult and politically sensitive management challenge. For purposes of this report, the term "ORV" does not include snowmachines or strictly over-the-snow vehicles. Management strategies, National Environmental Policy Act (NEPA) compliance, and policy interpretations on the management of ORVs have varied from unit to unit.

Retail sales of ORVs and their use have increased markedly in the United States since the 1970s. In recent years regulation and management of ORV use on public lands throughout the country has been identified as a serious issue for many land and resource management agencies. In Alaska, the levels and extent of use have expanded most rapidly on state and Bureau of Land Management (BLM) lands. A growing controversy about the environmental impacts associated with ORV activities has driven the need to balance ORV use and social and



environmental values. This was the impetus for the April 2002 Alaska Snowmachine and All Terrain Vehicle Summit and Workshop convened in Anchorage.

NPS national regulations generally prohibit the use of ORVs. Pursuant to the Organic Act and ANILCA, ORVs may be used in Alaska park units in certain circumstances. Several provisions in ANILCA authorizing ORV use also supersede the Wilderness Act. ORV use in backcountry park areas and their lasting impacts create a new level of tension for NPS as it seeks to balance ORV use with protecting park resources and providing for nonmotorized visitor enjoyment.

Part I of this report summarizes laws, regulations, and policies applicable to ORV use in Alaska park units. Part II documents the current state of NPS knowledge on ORV use, impacts, and

trends on NPS lands in Alaska. Part III summarizes existing and on-going research on ORV use and impacts. Part IV summarizes the findings. The report concludes with part V, an action plan for the NPS to develop a process, consistent with law, regulation, policy, and good science, for managing ORV use so the resources remain unimpaired for future generations.



I. STATUTES, REGULATIONS, AND POLICIES GOVERNING ORV USE IN ALASKA NATIONAL PARK UNITS

Solicitor's Opinion ORV Use in Alaska Park Areas December 17, 2001

You have requested that I prepare an opinion that sets forth the National Park Service's (NPS) authority to allow and regulate off-road vehicle (ORV) ¹ use in Alaska national park units. Questions have been raised regarding the applicability of Executive Order (E.O.) 11644 and whether ORV provisions in the Alaska National Interest Lands Conservation Act (ANILCA) modify the NPS Organic Act duty to protect park resources from impairment. Part I of this opinion will review NPS authority under the Organic Act to allow or prohibit ORVs in park areas. Part II examines how the NPS has exercised Organic Act authority by reviewing chronologically E.O. 11644 and regulations on the general use of ORVs. Part III discusses provisions of ANILCA that modify the NPS's discretion under the Organic Act by allowing ORVs in certain circumstances. Attached in Appendix A is a table outlining ORV regulations in 36 C.F.R. part 4 and select Alaska-specific regulations and statutes the NPS has utilized to allow and regulate ORV use in Alaska park areas.

I. THE NPS HAS DISCRETION UNDER THE ORGANIC ACT TO ALLOW OR PROHIBIT ORVS IN PARK AREAS UNLESS CONGRESS HAS PROVIDED OTHERWISE.

Where Congress has not specifically authorized ORVs in park areas,² the NPS has discretion under 16 U.S.C.A. §§ 1, 1a-1, and 3 (NPS Organic Act) to determine if ORVs should be permitted and the manner in which ORV use may occur.³ Section 1 of the Organic Act directs the NPS to manage park areas "by such means and measure as to conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."⁴

Congress enacted section 1a-1 of the same title in 1970 and amended it 1978. Section 1a-1 provides, in part, that "Congress further reaffirms, declares, and directs that the promotion and regulation of the various areas of the National Park System...shall be consistent with and founded in the purpose established by section 1 of this title....The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be

¹ For purposes of this document, the term "off-road vehicle" (ORV) excludes snowmachines.

² When used in this document, the phrase "national park area" or "park area" refers to a unit managed by the National Park Service. If the term "park" is used, it refers to a unit designated as a national park.

³ See, e.g., Conservation Law Foundation of New England, Inc. v. Secretary of the Interior, 864 F.2d 954 (1st Cir. 1989) (NPS decision to restrict ORV use in national seashore upheld); Southern Utah Wilderness Alliance v. Dabney, 222 F.3d 819 (10th Cir. 2000) (NPS decision to allow ORVs in an ecologically sensitive area in a national park was not contrary to the plain language of the Organic Act); Bicycle Trails Council of Marin v. Babbitt, 82 F.3d 1445 (9th Cir. 1996) (NPS decision to restrict bicycle use in recreation area upheld); Wilderness Public Rights Fund v. Kleppe, 608 F.2d 1250 (9th Cir. 1979) (NPS decision to limit boating in Grand Canyon upheld). See also 36 C.F.R. Parts 1-5, 7, 13 (2001).

⁴ 16 U.S.C.A. § 1 (West 2000).

exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress." In order to carry out these mandates, section 3 authorizes the Secretary of Interior to promulgate regulations "as he may deem necessary or proper for the use and management" park areas.⁶

If challenged in court, NPS regulations interpreting statutes it is charged with implementing are entitled to deference. The court's review is a two-step process. First, the court asks whether Congress has spoken to the issue at hand. If so, the inquiry ends there; the court must give effect to Congress's direction. If the statute is ambiguous and the agency promulgates a regulation interpreting the provision, the court evaluates whether the agency's interpretation is reasonable. The court must defer to an agency's interpretation so long as it is reasonable.

Where Congress has not specifically authorized ORV use, the NPS "is empowered with the authority to determine what uses of park resources are proper and what proportion of the park's resources are available for each use." In absence of specific Congressional direction to the contrary, NPS regulations allowing or prohibiting ORVs are entitled to deference.

II. HOW THE NPS HAS EXERCISED ORGANIC ACT AUTHORITY WITH RESPECT TO ORVS: A CHRONOLOGICAL OVERVIEW AND LEGAL ANALYSIS OF EXECUTIVE ORDER 11644, 36 C.F.R. § 4.10, AND 43 C.F.R. § 36.11(G).

In 1972, President Nixon signed E.O. 11644.¹⁴ The E.O. recognized ORV use conflicts with "wise land and resource management practices, environmental values, and other types of

the "Secretary of Energy and the Nuclear Regulatory Commission."

⁵ 16 U.S.C.A. § 1a-1 (West 2000).

⁶16 U.S.C.A. § 3 (West 2000).

⁷ U.S. v. Mead Corp., 121 S.Ct. 2164, 2171-72 (2001).

⁸ Agency interpretations of statutes made through policy statements, agency manuals, enforcement guidelines, or opinion letters receive less deference than regulations. *Christensen v. Harris County*, 529 U.S. 576, 587 (2000). This lesser form of deference is commonly referred to as "*Skidmore*" deference. *Skidmore* et al. v. *Swift Co.*, 323 U.S. 134 (1944). Interpretations found in such sources are entitled to respect and considered persuasive, but not binding on the reviewing court. *Id.* Interpretations that have not been formally adopted, including interpretations formed in litigation or draft policies, receive little or no deference. *See Bowen v. Georgetown Univ. Hospital*, 488 U.S. 204, 212-213 (1988); *Dabney*, 222 F.3d at 829. Agencies are also entitled to deference when interpreting its own regulations. *See Udall v. Tallman*, 380 U.S. 1, 16-18 (1965). The rule governing deference for regulatory interpretation is a two-step process mirroring the standard discussed in this Part. *Id.*

⁹ Chevron U.S.A. Inc. v. Natural Resources Defense Council, 487 U.S. 837, 842 (1984).

¹⁰ *Id.* at 842-43.

¹¹ *Id.* at 843, 844.

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¹³ Bicycle Trails Council of Marin, 82 F.3d at 1454 (citing Wilderness Public Rights Fund, 608 F.2d at 1253).

¹⁴ Exec. Order No. 11644, 37 Fed. Reg. 2877 (Feb. 8, 1972), amended by Exec. Order No. 11989, 42 Fed. Reg. 26959 (May 24, 1977) and Exec. Order No. 12608, 52 F.R. 34617 (Sept. 9, 1987), reprinted as amended in the notes following 42 U.S.C.A. § 4231 (West 1994) (42 U.S.C. § 4231 was repealed in 1982). E.O. 11989 added section 9 to the original order. Section 9(a) requires agencies to close areas to ORV use if it will cause or is causing "considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources."

Section 9(b) authorizes agencies to close areas to ORV use that have not been designated in accordance with section 3 of the E.O. E.O. 12608 changed an internal reference in the original E.O. from "Atomic Energy Commission" to

recreational activity[.]"¹⁵ The purpose of the E.O. was to establish policies and procedures on the use of ORVs to ensure resource protection, visitor safety, and minimize user conflict.¹⁶ The E.O. defined an ORV as any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland or other natural terrain.

The definition, however, explicitly excluded ORVs authorized by permit, license, lease, or contract.¹⁸

To effect its purpose, section 3 of the E.O. directed federal agencies to promulgate regulations that establish procedures for designating areas and trails for ORV use that achieve the E.O.'s stated purpose.¹⁹ Under authority delegated by Congress in the Organic Act, the NPS implemented this requirement in 36 C.F.R. § 4.19 in 1974.²⁰ In 1987, the NPS amended section 4.19 and re-codified it as section 4.10.²¹ Subsection (a) of this provision prohibits the use of ORVs except on roads, parking areas, and designated routes and areas.²² Subsection (b) reads:²³ Routes and areas designated for off-road motor vehicle use shall be promulgated

Routes and areas designated for off-road motor vehicle use shall be promulgated as special regulations. The designation of routes and areas shall comply with 1.5 of this chapter and E.O. 11644 (37 FR 2887). Routes and areas may be designated only in national recreation areas, national seashores, national lakeshores and national preserves.

36 C.F.R. § 4.10(b) has two effects for Alaska park areas: 1) routes and areas can only be designated in national preserves; and 2) designation of routes or areas must be accomplished by promulgation of a special park regulation.²⁴ This provision is summarized in the table in Appendix A.

Section 3 of the E.O. also requires the designations made pursuant to the agency regulations (§ 4.10(b) for the NPS) to meet the following criteria: ²⁵

- 1) "Areas and trails shall be located to minimize damage to soil, watershed, vegetation, or other resources of the public lands."
- 2) "Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitat."
- 3) "Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors."

¹⁷ E.O. § 2(3).

¹⁵ Excerpt from the introductory paragraph of the E.O.

¹⁶ E.O. § 1.

¹⁸ E.O. § 2(3).

¹⁹ E.O. § 3(a).

²⁰ Travel on Roads and Designated Routes, 39 Fed. Reg. 11822 (Apr. 1, 1974) (to be codified at 36 C.F.R. § 4.19) (recodified at 36 C.F.R. § 4.10).

²¹ Travel on Roads and Designated Routes, 52 Fed. Reg. 10670, 10672-73 (Apr. 2, 1987).

²² Travel on Roads and Designated Routes, 36 C.F.R. § 4.10(a) (2001).

²³ Travel on Roads and Designated Routes, 36 C.F.R. § 4.10(b) (2001).

²⁴ Travel on Roads and Designated Routes, 36 C.F.R. § 4.10(b) (2001).

²⁵ E.O. § 3(a)-(b).

4) "Areas and trails shall not be located in official designated Wilderness Areas. Areas and trails shall be located in areas of the National Park system only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values."

5) The agency must provide "adequate opportunity to for public participation" when designating areas and trails.

After the passage of ANILCA in 1980, the NPS utilized authority under the Organic Act to modify the regulation of ORV use in Alaska park areas. These rules were codified in 36 C.F.R. part 13. Section 13.14 provided superintendents the authority to allow ORVs on existing trails (not in wilderness) pursuant to a permit after a compatibility finding.

In 1986, the Department of Interior (DOI) promulgated regulations governing access in Alaska conservation system units (CSUs) and repealed agency specific access regulations for these areas, including section 13.14.²⁷ These regulations are found in 43 C.F.R. part 36.²⁸ Part 36 primarily implements the access provisions of Title XI of ANILCA. Though ANILCA does not authorize the general use of ORVs, part 36 regulations include a provision allowing ORVs.²⁹ The statutory source of authority for allowing ORVs in park areas under the DOI regulation is the NPS Organic Act.

The DOI regulation on the general use of ORVs mirrored the repealed NPS regulation at 36 C.F.R. § 13.14.³⁰ The DOI provision allows the land managing agency to authorize the general use of ORVs two different ways: 1) in accordance with E.O. 11644 (for NPS areas this requires compliance with 36 C.F.R. § 4.10(b)); <u>or</u> 2) pursuant to a permit from the superintendent.³¹ The permit option allows ORV use by permit on existing ORV trails not in

³¹ Off-Road Vehicles, 43 C.F.R. § 36.11(g)(1) (2001).

²⁶ National Park System Units in Alaska, 46 Fed. Reg. 5642, 5644 (proposed Jan. 19, 1981) (to be codified at 36 C.F.P. pt. 13) 46 Fed. Reg. 31836, 31844 (June 17, 1981) (NPS ORV regulation at 36 C.F.P. & 13,14 was repeated.)

C.F.R. pt. 13) 46 Fed. Reg. 31836, 31844 (June 17, 1981) (NPS ORV regulation at 36 C.F.R. § 13.14 was repealed in 1986). The reference in this source is to the NPS ORV regulation (section 4.19) in effect at the time the regulation was written. Section 4.19 was amended and recodified in the same title as section 4.10 in 1987. Travel on Roads and Designated Routes, 52 Fed. Reg. 10670, 10672-73 (Apr. 2, 1987).

²⁷ Transportation and Utility Systems in and Across, and Access Into, Conservation System Units in Alaska, 51 Fed. Reg. 31619, 31629 (Sept. 4, 1986).

²⁸ Transportation and Utility Systems in and Across, and Access Into, Conservation System Units in Alaska, 43 C.F.R. §§ 36.1-36.13 (2001).

²⁹ See Transportation and Utility Systems in and Across, and Access Into, Conservation System Units in Alaska, 51 Fed. Reg. at 31629 (Sept. 4, 1986); 43 C.F.R. § 36.11(a) (2001). ANILCA does, however, allow the use of "motor vehicles" in support of commercial fishing in select areas (16 U.S.C. § 410hh-4, ANILCA § 205), "means of surface transportation traditionally employed" for subsistence (16 U.S.C. § 3120(b), ANILCA § 811(b)), "adequate and feasible" access to inholdings (16 U.S.C. § 3170(b), ANILCA § 1110(b)), and temporary access (16 U.S.C. § 3171, ANILCA § 1111). These provisions are discussed in Part III of this opinion. ANILCA also establishes procedures for establishing transportation and utility systems, which includes road (16 U.S.C. §§ 3161-3168, ANILCA §§ 1101-1108). These allowances are implemented at 36 C.F.R. §§ 13.21(c), 13.46 (2001); 43 C.F.R part 36 (2001).

³⁰ Off-Road Vehicles, 43 C.F.R. § 36.11(g)(2) (2001) (allows ORVs upon the same three criteria the NPS adopted in

³⁰ Off-Road Vehicles, 43 C.F.R. § 36.11(g)(2) (2001) (allows ORVs upon the same three criteria the NPS adopted in 13.14: 1) by permit, 2) existing ORV trails, but not in wilderness, and 3) after a compatibility finding).

wilderness, upon a finding of compatibility.³² As previously mentioned, ORVs by permit are not subject to the E.O.³³ This authorization is summarized in the table in Appendix A.

The NPS and DOI determined that 36 C.F.R. § 4.10 was too restrictive for Alaska.³⁴ In 1981 when NPS proposed access regulations for the new Alaska park areas, the NPS stated that "[the proposed access regulations] are necessary to meet the special needs in Alaska for reasonable access across largely undeveloped park lands."³⁵ DOI stated in the preamble to the final regulation in 1986 that "Interior believes that [this] regulation of ORVs in areas provides the proper balance between adequate ORV use and protection of the purposes and values for which the areas were established [and] the maximum ORV use allowable under current law."³⁶ While the NPS and DOI regulations limited the ORV authorization to existing trails, both entities intended that any *new* trails systems be designated in accordance with the E.O. and the agency's implementing regulation (for the NPS, 36 C.F.R. § 4.10(b)).³⁷

In summary, while the NPS has exercised authority granted by the Organic Act to generally prohibit ORV use in park areas, current regulations permit the general use of ORVs under two separate regulatory provisions: 1) section 4.10(b) of 36 C.F.R. which allows Alaska park superintendents to designate routes and areas in non-wilderness national preserves pursuant to a special regulation after considering the impacts discussed in section 3 of E.O. 11644; and 2) 43 C.F.R. § 36.11(g) which allows superintendents to issue permits for ORVs on existing ORV trails, but not in wilderness, upon determining such use is compatible with park purposes. Both provisions must be implemented consistent with the Organic Act non-impairment standard since the Organic Act is the statutory source of authority for both regulations.

III. ANILCA MODIFIES NPS DISCRETION UNDER THE ORGANIC ACT BY AUTHORIZING ORV USE FOR SUBSISTENCE, COMMERCIAL FISHING IN THREE PARK AREAS, ACCESS TO INHOLDINGS, REINDEER GRAZING IN BERING LAND BRIDGE, AND TEMPORARY ACCESS.

While NPS has exercised discretion under the Organic Act to generally prohibit ORVs, ANILCA specifically authorized ORVs in certain circumstances. 40 First, Congress authorized

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³² Off-Road Vehicles, 43 C.F.R. § 36.11(g)(2) (2001).

³³ E.O. § 2(3).

³⁴ See Transportation and Utility Systems in and Across, and Access Into, Conservation System Units in Alaska, 51 Fed. Reg. at 31626 (Sept. 4, 1986); National Park System Units in Alaska, Off-Road Vehicles, 46 Fed. Reg. at 5644 (proposed Jan. 19, 1981) (to be codified at 36 C.F.R. § 13.14) (repealed 1986).

³⁵ National Park System Units in Alaska, Off-Road Vehicles, 46 Fed. Reg. at 5644 (proposed Jan. 19, 1981) (to be codified at 36 C.F.R. § 13.14) (repealed 1986).

³⁶ Transportation and Utility Systems in and Across, and Access Into, Conservation System Units in Alaska, Off-Road Vehicles, 51 Fed. Reg. at 31626 (Sept. 4, 1986).

³⁷ Transportation and Utility Systems in and Across, and Access Into, Conservation System Units in Alaska, Off-Road Vehicles, 51 Fed. Reg. at 31626; National Park System Units in Alaska, 46 Fed. Reg. at 31844 (June 17, 1981).

³⁸ Travel on Park Roads and Designated Routes, 36 C.F.R. § 4.10(b) (2001); Off-Road Vehicles, 43 C.F.R. § 36.11(g)(1)-(2) (2001).

³⁹ 16 U.S.C.A. § 3 (West 1994).

⁴⁰ In 1985, Congress granted two trail easements to Nana Regional Corporation in Cape Krusenstern National

"surface transportation traditionally employed" for subsistence. Second, Congress authorized "motorized vehicles" for commercial fishing in Cape Krusenstern and certain locations in Glacier Bay, and Wrangell-St. Elias. Third, ANILCA guarantees "adequate and feasible access" to inholdings. Fourth, ANILCA permits the Secretary to allow temporary access to or across park areas so long as NPS lands will not be permanently harmed. Lastly, Congress authorized ORVs for reindeer grazing purposes in Bering Land Bridge. E.O. 11644 does not apply to ORV authorizations pursuant to these provisions of ANILCA.

Section 811(b) of ANILCA provides in part that "[n]otwithstanding any other provision of this Act or other law, the Secretary shall permit on the public lands appropriate use for subsistence purposes...means of surface transportation traditionally employed for such purposes by local rural residents, subject to reasonable regulation."⁴⁷ The NPS implemented this provision in 36 C.F.R. § 13.46. Any subsistence ORV use that impairs park resources would not be "appropriate." If ORVs were traditionally used in a park area for subsistence purposes, such use may continue, even in wilderness, so long as the ORV use does not impair park resources and values. Only one park unit, Wrangell-St. Elias, has determined that ORVs were traditionally employed for subsistence. Section 811(b) is summarized in the table in Appendix A.

Section 205 of ANILCA applies to Cape Krusenstern National Monument, the Malaspina Glacier Forelands area of Wrangell-St. Elias National Preserve, and the Dry Bay area of Glacier Bay National Preserve. This section prohibits the NPS from taking any "action to restrict unreasonably the exercise of valid commercial fishing rights or privileges obtained pursuant to existing law, including the use of public lands for...motorized vehicles...directly incident to the exercise of such rights or privileges, except that the prohibition shall not apply to activities which the Secretary, after conducting a public hearing in the affected locality, finds constitute a significant expansion of the use public lands beyond the level of such use during 1979." ORVs are allowed under this provision since they are "motorized vehicles." ⁴⁹ The NPS has implemented this provision in 36 C.F.R. § 13.21(c). Section 13.21(c)(2) allows park superintendents to permit ORV use beyond the 1979 levels pursuant to a permit. Permits for expanded use may be denied or current uses restricted or revoked if either 1) such use would significantly expand the use of the area beyond the 1979 level, or 2) the use directly threatens or

Monument (CAKR) in an amendment to the Alaska Native Claims Settlement Act. 16 U.S.C.A. § 1629 (West 2000). This provision, as well as other federal law, such as section 17(b) of the Alaska Native Claims Settlement Act may authorize ORVs within Alaska park areas. These laws are beyond the scope of this opinion and are not discussed in this document.

⁴¹ ANILCA § 811(b), 16 U.S.C.A. § 3121(b) (West 2000).

⁴² ANILCA § 205, 16 U.S.C.A. § 410hh-4 (West 2000).

⁴³ ANILCA § 1110(b), 16 U.S.C.A. § 3170(b) (West 2000).

⁴⁴ ANILCA § 1111, 16 U.S.C.A. § 3171 (West 2000).

⁴⁵ ANILCA § 201, 16 U.S.C.A. § 410hh(2) (West 2000); Bering Land Bridge National Preserve, Off-Road Vehicles, 36 C.F.R. § 13.61(a) (2001).

⁴⁶ E.O. 11644 only applies when the Secretary exercises discretion afforded under the Organic Act to designate routes or areas for ORV use.

⁴⁷ ANILCA § 811(b), 16 U.S.C.A. § 3121(b) (West 2000).

⁴⁸ 16 U.S.C. § 410hh-4, ANILCA § 205 (West 2000).

⁴⁹ 16 U.S.C. § 410hh-4, ANILCA § 205 (West 2000).

significantly impairs the values and purposes for which the unit was established.⁵⁰ This provision is summarized in the table in Appendix A.

Section 1110(b) of ANILCA provides that "[n]otwithstanding any other provision of this Act or other law, in any case in which State owned or privately owned land, including subsurface rights of such owners underlying public lands, or a valid mining claim or other valid occupancy is within or is effectively surrounded by one or more conservation system units...the State or private owner or occupier shall be given by the Secretary such rights as may be necessary to assure adequate and feasible access for economic and other purposes to the concerned land by such State or private owner or occupier and their successors in interest. Such rights shall be subject to reasonable regulations issued by the Secretary to protect the natural and other values of such lands." This provision ensures adequate and feasible access to inholdings notwithstanding the NPS Organic Act or Wilderness Act. DOI has implemented this provision in 43 C.F.R. § 36.10, which establishes a process for granting a right-of-way permit.

Section 1111 provides that "[n]otwithstanding any other provision of this Act or other law the Secretary shall authorize and permit temporary access by the State or a private landowner to or across any conservation system unit...in order to permit the State or private landowner access to its land for purposes of survey, geophysical, exploratory, or other temporary uses thereof whenever he determines such access will not result in permanent harm to the resources of such unit...." As opposed to section 1110(b) which provides access for inholders, this section authorizes state and private landowners whose land is not necessarily surrounded by a CSU temporary access "to or across" a CSU. This section permits temporary access via motorized or mechanized means in wilderness so long as it does not permanently harm park areas. DOI implemented this provision in 43 C.F.R. § 36.12.

Section 201(2) of ANILCA, which established Bering Land Bridge National Preserve, directed the Secretary to "continue reindeer grazing use, including necessary facilities and equipment...." The NPS has interpreted this language to allow ORV use and implemented this interpretation in 36 C.F.R. § 13.61(a). Section 13.61(a) provides "[t]he use of off-road vehicles for purposes of reindeer grazing may be permitted in accordance with a permit issued by the Superintendent."

CONCLUSION

The NPS has generally prohibited the use of ORVs in park areas.⁵⁷ The regulations provide an exception to this general prohibition by allowing ORVs 1) on routes or in areas in

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⁵⁰ Commercial fishing, 36 C.F.R. §§ 13.21(c)(1)-(2) (2001).

⁵¹ ANILCA § 1110(b), 16 U.S.C.A. § 3170(b) (West 2000).

⁵² ANILCA § 1110(b), 16 U.S.C.A. § 3170(b) (West 2000).

⁵³ ANILCA § 1111, 16 U.S.C.A. § 3171 (West 2000).

⁵⁴ ANILCA § 1111, 16 U.S.C.A. § 3171 (West 2000).

⁵⁵ ANILCA § 1111, 16 U.S.C.A. § 3171 (West 2000).

⁵⁶ 16 U.S.C.A. § 410hh(2) (West 2000).

⁵⁷ If Congress has not specifically authorized ORV use or an individual does not have a permit to operate an ORV on an existing trail, such use is prohibited under 36 C.F.R. § 4.10. Under 36 C.F.R. § 1.2(a)(3), this prohibition applies to lands within park boundaries below the ordinary high water mark regardless of ownership of the

preserve units pursuant to a special regulation, or 2) pursuant to a permit on existing ORV trails.⁵⁸ ORVs by permit are not subject to E.O. 11644.⁵⁹ The E.O. does not apply to ORV access authorized by ANILCA or on rights-of-way.

Should the NPS decide to allow ORVs in a preserve where an ORV trail does not currently exist, current regulations require that the NPS follow the designation process in 36 C.F.R. § 4.10(b) and consider the criteria specified in section 3 of the E.O.

When authorizing ORV use under 36 C.F.R. §§ 4.10, 13.61(a) (reindeer grazing); 43 C.F.R. § 36.11(g); and ANILCA §§ 811(b), 205, 1111, the NPS must implement the authorization consistent with the Organic Act. ORVs may be allowed in wilderness only under ANILCA §§ 811(b), 1110(b), and 1111. 61

submerged land. The regulation does not apply on other state or private lands.

⁵⁹ E.O. § 2(3).

⁵⁸ Travel on Roads and Designated Routes, 36 C.F.R. § 4.10(b) (2001); Off-Road Vehicles, 43 C.F.R. § 36.11(g) (neither provision allows ORVs in designated wilderness).

⁶⁰ Depending on the authorization, rights-of-way may modify the NPS Organic Act duty.

⁶¹ Depending on the authorization, ORVs on rights-of-way may be allowed in wilderness areas.

ORV USE IN ALASKA PARK AREAS*

	Designated Routes/Areas in Preserves	Permits for Existing Trails	Subsistence	ORV Use in Support of Commercial Fishing
Statutory and Regulatory Source of Authority	16 U.S.C.A. § 3. 36 C.F.R. § 4.10 (implements E.O. 11644). See 39 Fed. Reg. 11822, 52 Fed. Reg. 10672-73.	16 U.S.C.A. § 3, 43 C.F.R. § 36.11(g)(2).	ANILCA § 811(b), 36 C.F.R. § 13.46(a).	ANILCA § 205, 36 C.F.R. § 13.21(c).
Authorizing Language	36 C.F.R. § 4.10(a) "Operating a motor vehicle is prohibited excepton routes and areas designated for off-road motor vehicle use." (b) "Routes and areas designated for off-road motor vehicle use shall be promulgated as special regulationsRoutes and areas may be designated only in national recreation areas, national seashores, national lakeshores and national preserves."	43 C.F.R. § 36.11(g)(1) "The use of off-road vehiclesis prohibited, except on routes or in areas designated by the appropriate Federal agency in accordance with Executive Order 11644or pursuant to a valid permit" (emphasis added) (2) "The appropriate Federal agency is authorized to issue permits for the use of ORVs on existing ORV trails located in areas (other than in areas designated as [wilderness]) upon a finding that such ORV use would be compatible with the purposes and values for which the area was established. The appropriate Federal agency shall include in any permit such stipulations and conditions as are necessary for the protection of those purposes and values."	811(b) "Notwithstanding any other provision of this Act or other law, the Secretary shall permit on the public lands appropriate use for subsistence purposesmeans of surface transportation traditionally employedsubject to reasonable regulation." 36 C.F.R. § 13.46(a) "Notwithstanding any other provision of this chapter, the use ofsurface transportation traditionally employed by local rural residents engaged in subsistence uses is permitted within park areas"	ANILCA § 205 "With respect to the Cape Krusenstern National Monument, the Malaspina Forelands area of Wrangell-St. Elias National Preserve and the Dry Bay area of Glacier Bay National Preserve, the Secretary may take no action to restrict unreasonably [privileges associated with commercial fishing] including the use ofmotorized vehiclesexcept that this prohibition shall not apply to activities which the Secretary, after conducting a public hearing in the affected locality, finds constitute a significant expansion of the use of park lands beyond the level of such use during 1979." 36 C.F.R. § 13.21(c) implements section 205. Section 13.21(c) is not quoted here, but criteria specified in 13.21(c) for allowing or restricting ORV use associated with commercial fishing are discussed below.
Criteria for Allowing ORV Use	 Designation requires a special regulation Preserves onlynot allowed in parks, monuments, or wilderness Must consider criteria in section 3 of the E.O. 	 ORVs by permit are exempt from E.O. 11644 and 36 C.F.R. § 4.10. E.O. 11644 § 2(3); see also 51 FR 31626, 51 FR 31844. Existing ORV trails Permit required Finding that ORV use is compatible with park purposes Permit conditions required to protect resources 	 Must have been traditionally employed Wilderness Act does not apply 	 Limited to Cape Krusenstern, Malaspina Forelands, and Dry Bay Limited to ORV use directly incident to the exercise of commercial fishing rights Expanded use beyond 1979 levels is allowed with a permit. See 36 C.F.R. § 13.21(c)(2). ORV privileges can be restricted or revoked and a permit for expanded use may be denied when there is either a concern for park resources or if such use would be a significant expansion from 1979 use levels. See 36 C.F.R. § 13.21(c)(1), (c)(2)(ii)(A)-(B)
Parks Affected		WRST	WRST	CAKR, GLBA, WRST

^{*} This table does not represent a complete list of statutes and regulations authorizing ORVs in Alaska park areas.

Alaska Regional Management Policies

Since 1980, ORV-related management issues have been addressed by several internal workgroups as well as in legislation ratifying an agreement that included a land exchange in Gates of the Arctic National Park and Preserve. Most of these efforts have addressed subsistence ORV use.

In 1997, the NPS prepared a document reviewing laws and regulations applicable to subsistence. 62 This document was reviewed in draft by the public before becoming final. Section 4 of this document addresses subsistence ORV access. In this document, the NPS stated that while "[ORVs] are generally not permitted for subsistence within NPS lands, ... [ORV] use may be permitted if such use is found to be traditional."63 The NPS recognizes that Congress intended to allow for advances in technology in making a "traditionally employed" finding. 64 The NPS will make "[d]eterminations of where ORV's [sic] have been traditionally employed . . . on a community or area basis" ⁶⁵ in collaboration with the SRCs. Determinations are/will be made in a regional context recognizing cultural differences and will be based on research findings "documenting traditional and contemporary access modes, use areas, and routes." 66 If ORVs are determined to be "traditionally employed" for subsistence, the NPS will manage subsistence ORV use "subject to reasonable regulation to protect park values and park resources."67 Wrangell-Saint Elias National Park and Preserve is the only park area to determine that ORVs were traditionally employed for subsistence by local rural residents.68

Congress also addressed subsistence ORV use in 1996 in Gates of the Arctic National Park and Preserve. ⁶⁹ The legislation resulted from a "lengthy dispute between the NPS and residents of Anaktuvuk Pass[.]"70 Residents of Anaktuvuk Pass sought to use ORVs for subsistence access to subsistence resources on park lands. The NPS position was that ORVs were not a traditional means of surface transportation and were therefore prohibited.⁷¹ The National Park Service and the Nunamiut Corporation initiated discussions in 1985 to address concerns over the use of all-terrain vehicles on park and wilderness land. These discussions resulted in an agreement, originally executed in 1992 and thereafter amended in 1993 and 1994, among the National Park Service, Nunamiut Corporation, the City of Anaktuvuk Pass, and Arctic Slope Regional

⁶⁴ Id. at 16.

⁶² National Park Service, Subsistence Issues Paper, at 15 (August 1997) (on file with the NPS-Alaska Regional Office).

⁶³ Id.

⁶⁵ Id. at 15.

⁶⁶ Id. at 19.

⁶⁷ Id at 15.

Wrangell-St. Elias National Park and Preserve General Management Plan, 1986 at 17.

⁶⁹ Pub. L. 104-333, Div. I, Title III, Section 302, Nov. 12, 1996, 110 Stat. 4117.

⁷⁰ Id at 15.

⁷¹ Final Legislative Environmental Impact Statement (EIS) All-Terrain Vehicles for Subsistence Use, Gates of the Arctic National Park and Preserve, Alaska, at 3. The EIS documented use as early as 1950 associated with the United States Geological Survey. The first ORV was acquired by an Anaktuvuk resident in 1960 and during the next decade four more ATVs were purchased by Anaktuvuk residents. Id at 4. The EIS states that by 1975 there were eight ATVs in the village and by 1980, there were fifteen ORVs in Anaktuvuk Pass. Id. at 5.

Corporation. Full effectuation of this agreement, as amended, by its terms required ratification by the Congress. To resolve the conflict, Congress ratified the agreement in 1996.

While the majority of ORV related documents and decisions concern subsistence use, the NPS seeks to address all types of ORV use and issues as consistently as possible on a statewide basis while recognizing regional/cultural differences.

National Park Service Management Policies 2001

NPS Management Policies 2001 is the highest of three levels of guidance documents in the NPS Directives System. Interim updates or amendments may be accomplished through director's orders (the second level in the system), while the most detailed and comprehensive guidance on implementing policies will be found in level three handbooks or reference manuals issued by associate directors. Very few of the latter have been developed to clarify guidance for management of ORV use in NPS units.

There are numerous sections of the NPS Management Policies that offer guidance in cases where ORV uses are allowed in NPS managed areas. All of these policies must be viewed in the context of specific statutory and regulatory provisions that apply in a particular unit. A decision to authorize ORV use must be consistent with policy. These policies also provide a framework for compliance and mitigation of potential impacts. The following is a summary of four NPS policies that apply most directly to managing ORV uses in NPS units.

1. Section 1.4 of the Management Policies represents the NPS interpretation of the Organic Act of 1916. The impairment that is prohibited by the Organic Act and the General Authorities Act is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that would otherwise be present for the enjoyment of those resources or values. Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact: the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts (Section 1.4.5 What Constitutes Impairment of Park Resources and Values).

The NPS established a workgroup to develop the guidance on the definitions of "impairment" required by Director's Order #55, which was superseded by section 1.4 of the Management Policies. The current consensus is that NEPA and NHPA Section 106 impact assessments offer the best process for impairment documentation.

- 2. Impacts of motorized equipment can be more than the obvious physical impacts to soils, wetlands, vegetation, or wildlife species. The NPS is required to preserve, to the greatest extent possible, the natural soundscapes of parks. Using appropriate management planning, superintendents will identify what levels of human-caused sound can be accepted within the management purposes of parks (Section 4.9, Soundscape Management).
- 3. The term "wilderness" will apply to lands that are suitable for wilderness designation, wilderness study areas, proposed wilderness, recommended wilderness, and designated wilderness. Potential wilderness may be a subset of any of these five categories. The policies

apply regardless of category (Section 6.3.1 General Policy). Managers contemplating the administrative use of aircraft or other motorized equipment or mechanical transportation in wilderness must consider impacts to the character, esthetics, and traditions of wilderness before considering the costs and efficiency of the equipment (Section 6.3.4.3 Environmental Compliance).

Public use of motorized equipment or any form of mechanical transport is prohibited in wilderness except as provided for in specific legislation. Applicable provisions of ANILCA implemented in 36 CFR part 13 and 43 CFR part 36 govern the use of motorized equipment by the public in wilderness areas in Alaska. The specific conditions under which the public may use motorized equipment will be outlined in each park's wilderness management plan (Section 6.4.3.3 Use of Motorized Equipment).

4. NPS administrative off-road vehicle use will be limited to what is necessary to manage the public use of designated off-road vehicle routes and areas; to conduct emergency operations; and to accomplish essential maintenance, construction, and resource protection activities that cannot be accomplished by other means (Section 8.2.3.1 Off-Road Vehicle Use).



II. CURRENT STATUS OF ORV USE IN ALASKA NATIONAL PARK UNITS

This section summarizes results from a preliminary survey completed by Alaska park staff in February 2002 on current ORV use patterns in Alaska park units. The survey asked for highly subjective data based on the best professional judgement of a limited number of people. The data were not gathered following a systematic on-the-ground survey. In many locations, NPS knowledge of routes, route condition, and associated impacts is neither up-to-date nor complete. Accordingly, readers must recognize the data garnered from the survey have a significant margin of error and are intended to be used only as a starting point for initiating more studies or where management actions may need to be taken.

Current Use and Trends

ORV use is known to occur in 13 Alaska park units. Kenai Fjords and Sitka reported no ORV routes or use in their units. It is not known whether ORV use occurs in Alagnak. These 13 units reported 65 routes totaling an estimated 700 miles. An unknown amount of dispersed use in also known to occur in several units. The reported routes range from one to 100 miles long, with an average length of 13 miles. Almost all known ORV routes were unplanned, user-developed routes, some of which are likely historical routes. Approximately half of the routes are mentioned in NPS documents, but less than a fourth are mapped by GPS. Most routes are in the parks and preserves of the Alaska Region units. Approximately 50 percent are located in designated or suitable wilderness. Minimal ORV use is thought to occur in monuments (ANIA, CAKR). Wrangell-St. Elias, Lake Clark, and Denali Parks/Preserves have the most known individual routes: 17, 13, and 10, respectively.

Park staff indicated that most routes in units are believed to be used for more than one purpose. Approximately three-quarters of the reported routes are thought to be used for both subsistence and recreation. Less than one half are thought to be used to access private inholdings. The vast



majority of use is thought to be by three and four-wheelers, though other ORVs, including Argos, six-wheelers, pick-up trucks are also known to be used in certain areas. It is thought that "weasels," tracked ORVs, use only a few routes. It is believed that use is increasing on a majority of the routes reported.

Park staff were asked to use their best professional judgment to rate routes as either "generally good condition," "has some problem areas," or being "severely degraded. Of those routes where conditions were known, approximately half are generally in good condition, roughly one third have "some problem areas," and less than one quarter were considered "severely degraded." It is thought that almost half of these routes are deteriorating or are continuing to deteriorate, approximately a third have stable route conditions, and conditions on a few of the routes are improving.

Management of Routes

Parks were asked to assign a priority (none, low, medium, high) to ORV issues. Kenai Fjords and Sitka stated that ORV use is not an issue. Denali, Klondike Gold Rush, Gates of the Arctic, Yukon-Charley, Alagnak, Kobuk Valley, Noatak, and Bering Land Bridge reported that ORV issues are a low priority for the park. Aniakchak, Cape Krusenstern, Lake Clark, Katmai, and Glacier Bay responded that ORV issues are a medium priority. Wrangell-St. Elias assigned ORV issues as a high priority for the park.

Of the 65 known routes, most park units have no on-the ground management actions planned in the immediate future. However, Klondike Gold Rush has been publishing public advisory notices and installing barriers to control ORV access. Additionally, Wrangell St.Elias and Denali are planning to prepare environmental documents that address ORV use. Park staff also reported that all severely degraded routes and almost half of the routes in generally good condition are being monitored in some fashion.

The majority of units indicated that most of their ORV related monitoring and management activities are done collaterally to other duties such as backcountry patrols, overflights, and law enforcement. These monitoring efforts tend to produce only subjective, qualitative data and provide only a coarse picture of change over time.

If funds and staff were available, park staff indicated that the following projects would be desirable:

- Route inventories and monitoring efforts (Aniakchak, Denali, Lake Clark, Western Arctic)
- Aerial photo surveys every five years of ORV routes (Western Arctic)
- Route inventory, mapping, and condition assessment (Lake Clark)
- Route mitigation or rehabilitation measures (Wrangell-St. Elias, Gates of the Arctic, Glacier Bay, Lake Clark)
- Soil surveys of routes and dispersed use areas (Wrangell-St. Elias)
- Responding to SRC suggestions that the initial determinations that ORVs were not traditionally employed within the units be reexamined (Katmai, Aniakchak, Denali)
- Determining public wants and needs for ORV access (Wrangell-St. Elias)
- Baseline data (most park units)

III. RESEARCH ON ORV USE, USERS, AND IMPACTS

Research on the impacts associated with ORV activities in the state is readily available. More than 48 references are identified and listed in the attached bibliography. There is, however, a lack of research on the impacts of small to medium sized ORVs; and most of the available work on that class of vehicle was conducted by or for NPS.

The results of the NPS sponsored research are best summarized by Happe, Shea, and Loya in their 1998 assessment of ORV impacts in Wrangell-St. Elias. They summarize their findings as follows:

ATV impacts varied significantly between vegetation and soil types. Mesic herbaceous and low shrub vegetation communities had the greatest number of route braids, route width, ponding, thaw depth and subsidence depth. These communities are found on cold and wet permafrost soils that are susceptible to churning and displacement of vegetation and organic matter from ATV use, and consequently have the least resistance to ATV impacts. Open forest communities, with soils that are well drained, were found to have a low number of braids, route width and ponding and intermediate thaw depth, demonstrating more resistance to ATV impacts. These communities may show rutting or compaction from ATV use, but will not show churning and displacement of vegetation and organic matter as in the wet soils. Dryas and tall willow communities, found on coarse well- drained cobble, gravel and sand substrate, had the least number of braids, route width and thaw depth and no ponding. These communities are the most resistant to the effects of ATVs.

ATV impacts on vegetation and soils increased as the amount of ATV use increased. As use increased from low to moderate amounts, impacts, in the form of reduced vegetation cover and structure, and increased bare ground exposure, increased significantly. The maximum damage to vegetation and soils occurs at moderate use (50-100 passes per year). At high use (greater than 100 passes per year), in sensitive vegetation types (mesic herbaceous and low shrub communities), the routes become impassable, resulting in the spread of the route area.

In all vegetation types, vegetation cover increased and the exposure of bare ground decreased after ATV use terminated. This indicates that vegetation can re-colonize abandoned routes. However, the vegetation structure and species composition of the inactive routes differed from the vegetation structure and species composition found in the unaffected vegetation. In addition, there was no recovery of subsidence and thaw depth and in some cases, sites continued to degrade after ATV use ceased.

Their findings complement earlier studies that found ORV route impacts are largely controlled by the level of use, vegetation, soils, and terrain characteristics. Unfortunately, building a correlation between vegetation/soil/terrain and route suitability has been hampered by a lack of detailed vegetation and soils maps for park units, route condition inventories, and limited data quantifying use.

Few studies have been conducted to qualitatively document the status or growth of ORV routes or ORV use across the state. The few regional studies available support the generally accepted view that there has been a significant expansion in use and a corresponding increase in

associated impacts. The use observation is supported by industry sales figures for the state. They document the sale of more than 25,000 small personal vehicles, predominately 4-wheeler ORVs, since the late 1970s with double digit sales figures for the last 3-4 years. It is generally accepted that this class of vehicle is largely responsible for the expansion of route systems and impacts across the state.

Based on patterns observed in other parts of the state, this increased use of ORVs across the state can be expected to lead to a rapid expansion of route miles in the near future.

Little research has been conducted to profile the typical ORV user. The general state of knowledge suggests that ORV users represent a broad spectrum of Alaskans, and ORV use is well integrated into both urban and rural lifestyles. Anecdotal evidence indicates that rural users typically use their machines for hunting, fishing, berry-picking, wood-gathering, and access to remote cabin and recreation sites. Urban users predominately use their machines to support sport hunting. Purely recreational use of ORVs appears to be less common than recreational snowmachine use, but a few areas relatively close to urban areas appear to receive heavy recreation ORV use during summer months.

The Development of Best Management Practices

NPS units need to evaluate through the NEPA and other processes whether routes are needed. If the process shows that ORV use is appropriate and if so, the manner in which use should occur. Best Management Practices should be considered and identified when planning for continued ORV use.

In recent years, the mitigation of degraded ORV routes has been the focus of research across the state and a number of studies have been initiated on methods to harden routes. This has stimulated a broader interest in the overall ORV routes management issue. New techniques for documenting route locations and inventorving route conditions have been developed, and a wider range of management



options is being explored. This work is leading to the development of a set of Best Management Practices (BMPs) for ORV routes. BMPs are systematic methods to describe route conditions that will provide managers with technical elements for sound science based resource management and decision making.

A proposed set of BMPs for ORV route management includes the following components:

- 1) Route Location Documentation
- 2) Route Condition Assessment
- 3) Secondary Impact Assessment
- 4) Assessment of Surrounding Environmental Conditions
- 5) Evaluation of Existing Management Options:
 - -Active Management of Existing Route
 - -Relocation of Degraded Route Segments
 - -Season Of Use Restrictions
 - -Type Of Use Restrictions
 - -Controlled Use
 - -Route Hardening
 - -Route Closure and passive/active restoration
- 6) Route Management Prescription Development
- 7) Prescription Implementation
- 8) Periodic Route Monitoring and Evaluation
- 9) Long-Term "Heavy" Maintenance
- 10) Annual "Light" maintenance Sweeps

Components of this set of BMPs are being tested throughout the state at a number of sites through cooperative efforts co-sponsored by NPS's Rivers and Trails Conservation Assistance (RTCA) program. They include projects with the Bureau of Land Management (BLM), Fish and Wildlife Service (USFWS), Alaska Department of Fish and Game (ADFG), Alaska Division of Parks and Recreation, US Forest Service (FS), and local Soil and Water Conservation Districts.

NPS Partnerships

The NPS has, through its RTCA program, developed cooperative relationships with other land management organizations to develop and test elements of the Best Management Practices. These partnerships can be expanded and promoted.

The NPS has the opportunity to develop partnerships with youth and other groups such as the Student Conservation Association (SCA) and Southeast Alaska Guidance Association (SAGA) work teams to provide labor for route maintenance and mitigation. Other partnerships, focused on funding management and mitigation efforts, also can be developed. These could be developed through the Recreation Route Grant



Program; National Corporation Wetlands Restoration Partnership; Coastal America Project; and an offsite, wetlands-impact mitigation program.

Statewide there has generally been a supportive interagency environment for discussions on ORV-related issues. This may be due to the overwhelming nature of the issue and the lack of management focus it has received by most agencies until recently. One indication of that increased interest was the wide agency and local government representation at the Alaska Recreation Rendezvous 2001 that took place September 2001 in Wasilla. There, more than 200 people met to discuss common route interests and begin to explore the complex issues associated with ORV management.

There was also widespread support for the April 2002 ATV and Snowmachine Summit and Workshop held in Anchorage. That meeting attempted to address some of the major issues facing the state. A strategy for interagency and public cooperation and response was proposed. We anticipate that follow-up interagency and stakeholder discussion groups will provide a framework for collaboration and partnerships that NPS can build on in the next few years.

In addition, the Forest Service and BLM have initiated several nationwide efforts to address common concerns and/or mandates. These include methods of inventorying route conditions and conducting route-planning training. The NPS could collaborate on those efforts.

Suggested Areas for Further Study and Information Gathering

- Develop a regionwide strategy for collecting time-series data to track ORV use and its associated impacts on NPS managed lands. Currently, there is only one dataset that addresses ORV use through time. Time-series information is key to detecting and monitoring ORV-related trends on both a unit by unit and regionwide basis. This might also include collecting information on routes and modes of transportation used.
- Obtain more accurate information regarding the location and length of routes and the location of dispersed use areas. Based on questionnaire responses, eight of ten routes are not GPS mapped and do not have alignments data plotted on GIS.
- Develop a systematic process for assessing route conditions, ORV impacts, and number of ORV users. Objective criteria for evaluating and determining the conditions of existing routes need to be developed to improve data quality, consistency, and compatibility.
- Assess future demand for ORV access and use. Further ORV study should include sociocultural research to determine the density of ORV ownership in local communities in, or adjacent to, park units and to identify the activities and purposes that ORVs support. It is also important to determine the level of ORV use by people from other areas and identify how and for what purposes they use ORVs.
- Continue to develop Best Management Practices.

IV. TASK FORCE FINDINGS

- The numerical information in this report can only be considered a rough approximation. The
 data garnered were from the survey questionnaire that park staff completed, based on their
 best professional judgment. Accordingly, the data have a significant margin of error and are
 only intended to be used as a starting point for management actions, including additional
 studies.
- 2. ORV use is reported in 13 of 16 NPS units in Alaska. Use levels are believed to be increasing on approximately half of the routes discussed in this report.
- 3. There are two general ways in which ORV use may legally be authorized in NPS units: one is by the issuance of a permit to use ORVs on existing trails following a compatibility finding, and the other is by promulgation of special regulations.
- 4. The range of management practices used to address ORV use has been very broad in the past 22 years. In one instance, Gates of the Arctic National Park and Preserve, a land exchange was consummated to address ORV management issues. In other units, management efforts have been quite limited, being conducted only as collateral duties.
- 5. Impacts to many park unit resources are not thoroughly documented. The evidence for a range of impacts, however, is clear in most areas reporting ORV use. The nature and degree of impacts vary greatly and have not been consistently quantified.
- 6. Several national policy guidelines offer some guidance to managers, regarding ORV use and management. While the Alaska Region has no regional policy at this time, several working groups have addressed ORV issues; and subsistence ORV use was addressed in a 1997 NPS document, as well as in the Gates of the Arctic land exchange legislation.
- 7. NPS planning documents have analyzed the development of ORV routes. It appears that almost all routes where ORV use is occurring have been unplanned, user-developed routes. Some routes, like those in the Kantishna area of Denali, were developed before the area was designated a portion of the national park system.
- 8. In many locations NPS knowledge of route condition and associated impacts is neither up-to-date nor complete.
- 9. Of routes where conditions are known, almost a quarter are considered severely degraded.

V. ACTION PLAN

The Alaska Region has determined that ORV management should receive greater attention than the current level. A number of specific actions are listed below. Which actions to implement, the order of implementation, and where they may be implemented will logically be driven by whether or not increased funds and staff are provided, or whether re-prioritized funds and existing staff are provided. Additionally, the period within which certain tasks would be accomplished (sooner versus later) will also logically drive many choices.

SHORT-TERM ACTIONS

- 1. Develop a strategic approach to identify funding, regionwide, to better address monitoring ORV use and impacts and to address our operating capacity to manage at the park level.
- 2. Identify historic routes and dispersed areas and determine the purpose they serve.
- 3. Increase monitoring of ORV uses to preclude new, unacceptable impacts to resources and to identify and stop negative impacts currently occurring to resources.
- 4. Develop and consistently use definitions for key terms, such as ATV, trail, route, and so forth.
- 5. Establish a set of Best Management Practices that NPS could apply to assessing the condition of ORV routes and dispersed uses. One or more NPS units could serve as the site/s for developing such practices.
- 6. Develop an educational program relating to stewardship and safety.
- 7. Identify a point of contact for in-park coordination.
- 8. In Wrangell–St. Elias National Preserve, consider rerouting Reeve's Trail.
- 9. Consult with Mentasta, Chistochina, and others about the Batzulnetas route and consider developing alternatives.
- 10. Close the Upper East Alsek trail in Glacier Bay National Preserve due to water flowing in the trail.

MID-TERM ACTIONS

11. Develop standard protocols for data collection and management of ORV trail condition. Using these protocols, each park unit should complete a quantitative, scientifically credible study to document current use.

Factors could include, but would not be limited to:

- determination of and mapping the location and extent that ORV use is occurring within NPS unit boundaries,
- condition assessments of routes being used,
- identification of user groups,
- determination of levels of use,
- evaluation of the potential for future use demands, and
- listing the types of ORVs being used.
- 12. Complete study of routes and modes of transportation used by residents of Kokhanok, Igiugig, and Levelock to access Katmai National Preserve.
- 13. Seek funding for an ORV Management Plan/EIS on the three northern Nabesna Road routes in Wrangell-St. Elias National Park and Preserve.

- 14. Publish route maps from the Dry Bay area in Glacier Bay National Preserve.
- 15. Improve boundary signage in Denali National Park to preclude recreational users from mistakenly using ORVs in the park.
- 16. Conduct oral history interviews in Aniakchak Monument resident zone communities to identify routes and modes of transportation used to access the monument.
- 17. Consult with the Cape Krusenstern National Monument (CAKR) Subsistence Resources Commission (SRC) and others to evaluate designating an ORV route from Sheshalik to the village of Kivalina. Evaluate proposing feeder trails off the main coastal trail to access subsistence resources in CAKR.
- 18. After discussions with users and evaluating the current resource impacts, Glacier Bay will make a determination as to the areas and routes where ORV use is authorized for supporting commercial fishing activities in the national preserve. Once the authorized routes and areas have been identified or determined, Glacier Bay will permanently close trails and areas not used in conjunction with commercial fishing or that have caused significant resource damage.
- 19. In Glacier Bay National Preserve, evaluate installing a bridge or rerouting the Dog Salmon Creek crossing.
- 20. Re-evaluate this action plan in two years.

LONG-TERM ACTIONS

- 21. Evaluate routes that are determined to be in poor condition. Continue to develop Best Management Practices. Develop management alternatives, including retention, relocation, replacement, mitigation, repair, and/or closure on routes that are in poor condition.
- 22. Map Pike Ridge Trail and determine location in relation to the park boundary in Katmai National Park. Continue discussions with Paug-Vik Ltd. and others on trail uses.
- 23. Review 2002 aerial photos of Aniakchak Caldera, Aniakchak River corridor, and coastal areas to provide a baseline for monitoring possible future uses.
- 24. Seek increased funding to perform inventory and monitoring of ORV use areas in the Cantwell, Stampede Corridor, and Kantishna Hills areas of Denali National Park.

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